

Amendments to the Abstract

Please replace the Abstract with the following new Abstract:

A method for enhancing effectiveness of a rotor blade of a wind energy device (a wind-wheel of electric generating unit), according to which a rotor blade is implemented in the form of a thick-airfoil wing, and a vortex system for controlling the boundary layer is arranged on the rear portion of the blade, upon the leeward, which system consists of longitudinal cavities having central bodies that define annular channels; the air being sucked from the cavities and central bodies through air-intakes into receivers. The air from the receivers, under the action of centrifugal forces generated by the rotating blade, is sucked towards the blade end. Within the cavities and on the blade's outer surface are positioned the plates that restrict streaming-down of the air flow along the blade.